Project Summary

Project Background
Within German Financial Cooperation with Montenegro, the energy sector is a focal area of cooperation. Currently, a new Energy Efficiency Programme under the German Financial Cooperation is envisaged with the objective to improve the efficient use of energy in public buildings of the Ministry of Education and Science (schools, dormitories, etc.) in Montenegro. By achieving the objective, the overall efficiency of energy consumption of Montenegro shall be improved, and positive contributions to the energy security of Montenegro and to the protection of global climate change shall be provided. It is expected that the programme will have positive impacts on employment and income generation during the current financial and economic crises.

Project Objectives
For the preparation of this programme, it is foreseen that an architect shall analyse (i) the needs for energy efficiency measures in buildings, (ii) the expected costs, (iii) the impacts and benefits and (iv) the potential programme design. The architect will coordinate his activities with the economist who will also conduct a fact finding mission for the programme.

Project Activities
• Preliminary analysis of the school infrastructure according to size, age, condition, new construction/growth, regional climatic conditions, available energy audits, regional poverty levels, etc., based on information of the Ministry of Education, relevant studies, and similar programmes and own findings during site visits. Emphasis were laid on specific energy consumption and benchmarking with good energy practices. As a result targeted categories of educational buildings were proposed.
• Assessment of the scope for establishing energy management structures at building level as well as centrally at the Ministry of Education and Science, as well as the needs for installation of monitoring equipment to evaluate the results of implementation of energy efficiency measures.
• Provision of an overview of the Montenegrin market of suppliers and distributors of EE equipment and materials, necessary for the EE measures implementation within the Programme.
• Assessment of the capacity of the local construction and engineering companies and suppliers to carry out such a Programme.
• Assessment of the local capacity of energy auditors and energy consultants working in Montenegro.
• Analysis the energy efficiency measures of the ongoing EE project of the World Bank and use the findings for the set-up of the FC program.
• Suggestion of a list of technically applicable standard measures to increase energy efficiency in buildings of the Ministry of Education and Science, considering average costs of the measures and energy saving potential.
• Description of potential beneficiaries/counterparts, their awareness regarding energy efficiency, their ability to implement energy efficiency measures, and their potential contributions to the Programme.

Services Provided
• Provision of an energy efficiency expert